

Facility Name: **Beasley Forest Products, Inc.**  
City: Hazlehurst  
County: Jeff Davis  
AIRS #: 04-13-161-00019

Application #: TV-521996  
Date Application Received: November 13, 2020  
Permit No: 2421-161-0019-V-03-0

<b>Program</b>	<b>Review Engineers</b>	<b>Review Managers</b>
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## Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

**I. Facility Description****A. Facility Identification**

## 1. Facility Name:

Beasley Forest Products, Inc.

## 2. Parent/Holding Company Name

Beasley Forest Products, Inc.

## 3. Previous and/or Other Name(s)

The facility has not been known by any previous or other name.

## 4. Facility Location

770 Uvalda Highway, Hazlehurst, GA 31539 (Jeff Davis County)

## 5. Attainment, Non-attainment Area Location, or Contributing Area

Beasley Forest Products, Inc. (hereinafter "facility") is located in Jeff Davis County, an attainment area for all pollutants.

**B. Site Determination**

There are no other facilities which could possibly be contiguous or adjacent and under common control.

**C. Existing Permits**

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off-Permit Change	Date of Issuance/Effectiveness	Purpose of Issuance
2421-161-0019-E-02-0	October 13, 2018	Title V Transitional Permit for the construction and operation of a direct-fired continuous kiln (ID No. DK09) and the continued operation of a hardwood and softwood sawmill.
2421-161-0019-E-02-1	October 24, 2020	Title V Transitional Permit amendment for the construction and operation of a new natural gas boiler (B002).

## D. Process Description

### 1. SIC Codes(s)

2421

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

### 2. Description of Product(s)

Beasley Forest Products, Inc. produces green and kiln-dried lumber and pallet wood.

### 3. Overall Facility Process Description

#### Wood Processing

The facility's wood processing activities include debarking logs, sawing debarked logs, planning, and trimming lumber, and chipping/hogging wood scrap/bark. The facility processes both pine and hardwood logs. All bark, sawdust, wood chips, and shavings are collected and either sold as product or reused on site.

#### Lumber Drying

The facility has 8 indirect steam heated batch kilns for drying hardwood lumber and 1 direct-fired continuous dry kiln for drying pine lumber. The facility has 2 boilers that provide steam to the batch kilns; 1 fueled by green sawdust and 1 fueled by natural gas.

### 4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

## E. Regulatory Status

## 1. PSD/NSR

40 CFR 52.21

Beasley Forest Products, Inc. (hereinafter “facility”) is located in Jeff Davis County, which is in attainment for all criteria pollutants. The facility is a non-major source under PSD regulations. The potential emissions of all PSD pollutants are less than their respective PSD major source thresholds. The PSD major source threshold is 250 tons per year (tpy) because the site is not one of the listed 28 source categories under PSD/NSR regulations. Emissions of each PSD regulated pollutant is less than 250 tpy so the site is minor source with respect to PSD/NSR regulations.

## 2. Title V Major Source Status by Pollutant

**Table 2: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓	✓		
PM <sub>10</sub>	✓			✓
PM <sub>2.5</sub>	✓			✓
SO <sub>2</sub>	✓			✓
VOC	✓	✓		
NO <sub>x</sub>	✓			✓
CO	✓			✓
TRS	n/a			
H <sub>2</sub> S	n/a			
Individual HAP	✓			✓
Total HAPs	✓			✓
Total GHG	✓			✓

## 3. MACT Standards

Boiler B001 is subject to 40 CFR 63 Subpart JJJJJ because the facility is an area source of HAP emissions. Please refer to Section III.B. of this narrative for more detailed discussion.

## 4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	no
Program Code 8 – Part 61 NESHAP	no
Program Code 9 - NSPS	yes
Program Code M – Part 63 NESHAP	yes
Program Code V – Title V	yes

## **Regulatory Analysis**

### **II. Facility Wide Requirements**

#### **A. Emission and Operating Caps:**

None applicable.

#### **B. Applicable Rules and Regulations**

None applicable.

#### **C. Compliance Status**

None applicable.

#### **D. Permit Conditions**

None applicable.

**III. Regulated Equipment Requirements****A. Equipment List for the Process**

<b>Emission Units</b>		<b>Applicable Requirements/Standards</b>	<b>Air Pollution Control Devices</b>	
<b>ID No.</b>	<b>Description</b>		<b>ID No.</b>	<b>Description</b>
DB01	Debarker	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
SM01	Sawmill	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
B001	<b>Boiler 1</b>  Wood-fired boiler 13.6 MMBtu/hr.	40 CFR 60 Subpart A 40 CFR 60 Subpart Dc 40 CFR 63 Subpart A 40 CFR 63 Subpart JJJJJ 391-3-1-.02(2)(d)	MC01	Multiclone 1
B002	<b>Boiler 2</b>  Natural gas fired boiler 20.08 MMBtu/hr.	40 CFR 60 Subpart A 40 CFR 60 Subpart Dc 391-3-1-.02(2)(d)	N/A	None
DK01	<b>Kiln 1</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK02	<b>Kiln 2</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK03	<b>Kiln 3</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK04	<b>Kiln 4</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK05	<b>Kiln 5</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK06	<b>Kiln 6</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK07	<b>Kiln 7</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
DK08	<b>Kiln 8</b>  Indirect-fired steam-heated batch kiln.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
DK09	<b>Kiln 9</b>  Direct-fired continuous dry kiln with green sawdust burner and natural gas burner.	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	N/A	None
PM01	Planer Mill	391-3-1-.02(2)(b)1. 391-3-1-.02(2)(e)1.(i)	CY04	Cyclone 4

\* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

## B. Equipment & Rule Applicability

Choose the applicable option(s) below:

Emission and Operating Caps:

The permit limits Kiln DK09's annual throughput at 115 MMbf/yr., which would result in 230 tpy VOC from DK09. The facility-wide VOC PTE would therefore be capped below 250 tpy, and the facility is minor under PSD regulations.

Rules and Regulations Assessment:

*40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*

According to the narrative that explained SIP Permit No. 2421-161-0019-B-01-0, Boiler B001 was constructed in 2005. Boiler B002 was permitted in late 2020 and will be constructed after that. Per 40 CFR 60.40c(a), both B001 and B002 are subject to 40 CFR 60 Subpart Dc. They are only subject to the fuel usage record keeping requirements specified in 40 CFR 60.48c(g)(2).

*40 CFR 63 Subpart DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products*

The facility is not subject to 40 CFR 63 Subpart DDDD because the facility is, per their application, not a major source of HAP emissions.

*40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*

Since the facility is an area source for HAP emissions and owns/operates a wood-fired boiler (ID No. B001), per 40 CFR 63.11193, B001 is subject to 40 CFR 63 Subpart JJJJJ.



According to 40 CFR 63.11194(a)(1), 63.11194(b), and 63.11200, B001 is an existing affected source in this rule. Since B001 is existing and is equipped with an oxygen trim system that maintains an optimum air-to-fuel ratio, it is not subject to any emission standards or any operating standards except the work practice standards specified in 40 CFR 63.11201(b) and Item 14. of Table 2 to 40 CFR 63 Subpart JJJJJ. The work practice standards require that the facility conduct a tune-up on Boiler B001 once every 5 years. The facility must follow the procedures specified in 40 CFR 63.11223 for the 5-year tune-ups.

40 CFR 63.11225(b) contains the 5-year compliance report requirements for Boiler B001.

40 CFR 63.11225(c) includes record keeping requirements for Boiler B001.

Per 40 CFR 63.11195(e), a gas-fired boiler is not subject to 40 CFR 63 Subpart JJJJJ. Since Boiler B002 only fires natural gas, it meets the definition of a gas-fired boiler in 40 CFR 63.11237; therefore, 40 CFR 63 Subpart JJJJJ does not apply to B002.

### *Georgia State Rules*

The continuous kiln (ID No. DK09) is subject to Georgia Air Quality Rule 391-3-1-.02(2)(b) "Visible Emissions" and Rule 391-3-1-.02(2)(e) "Particulate Emission from Manufacturing Processes." Georgia Rule 391-3-1-.02(2)(b)1. limits the opacity of its visible emissions to forty (40) percent. Since Kiln DK09 was installed after July 2, 1968, the allowable PM emission rate is specified by Georgia Rule 391-3-1-.02(2)(e)1.(i), which is stated as follows:

$$E = 4.1 * P^{0.67} \quad \text{for process input weight rate up to and including 30 tons per hour.}$$

$$E = 55 * P^{0.11} - 40 \quad \text{for process input weight rate above 30 tons per hour.}$$

Where E equals the allowable PM emission rate in pounds per hour and P equals the process input weight rate in tons per hour.

Compliance with the GA Rule (e) PM emission standards for Kiln DK09 is expected as follows.

Table 3: GA Rule (e) PM Emission Standards for Kilns KL01, KL02, and KL04

Name/ID No.	Process Input Weight Rate (P) (MMbf/yr.)	Process Input Weight Rate (P) (tons/hr.)	Allowable Emission Rate (E) (lbs. PM/hr.)
Kiln DK09	115	26.3	$P = 4.1 * 26.3^{0.67} = 36.7$

$$1 \text{ ft}^3 = 12 \text{ bf}$$

$$\text{Assumed Wood Density} = 48 \text{ lbs./ft}^3$$

$$115 \text{ MMbf/yr.}$$

$$= (115,000,000 \text{ bf/yr.}) * (1 \text{ ft}^3/12 \text{ bf}) * (48 \text{ lbs./ft}^3) * (1 \text{ ton}/2,000 \text{ lbs.}) * (1 \text{ yr.}/8,760 \text{ hrs.})$$

$$= 26.3 \text{ tph}$$

For a lumber drying kiln, PM emission rate is 0.14 lb./Mbf.

PM Emission Rate of Kiln DK09

= (0.14 lb. PM/Mbf)\*(115 MMbf/yr.)\*(1 yr./8,760 hrs.)

= 1.84 lbs. PM/hr. < 36.7 lbs. PM/hr.

The kiln also complies with the GA Rule (b) 40 percent opacity limit.

#### C. Permit Conditions

Condition 3.2.1 contains the PSD avoidance limit for the operation of new Kiln DK09.

Condition 3.2.2 specifies the fuel types for the direct-fired Kiln DK09.

Condition 3.2.3 specifies the fuel type for Boiler B001, which supplies steam to eight existing hardwood drying kilns (ID Nos. DK01 through DK08). Note that changing B001's fuel type will require a re-evaluation of 40 CFR 63 Subpart JJJJJ.

Condition 3.2.4 specifies the fuel type for Boiler B002, which supplies steam for hardwood drying. With natural gas being its sole fuel source, B002 avoids being subject to 40 CFR 63 Subpart JJJJJ.

Condition 3.2.5 requires that the facility operate the power vent on Kiln DK09 at all times during the operation of DK09. The vertical (exit) velocity provided by the power vent is one of the key elements that the facility used to demonstrate compliance with the GA Toxic Guidelines.

Condition 3.3.1 subjects Boilers B001 and B002 to 40 CFR 60 Subpart A and Subpart Dc.

Condition 3.3.2 subjects Boiler B001 to 40 CFR 63 Subpart A and Subpart JJJJJ.

Condition 3.3.3 includes the requirements specified in 40 CFR 63.11205(a) for Boiler B001.

Condition 3.4.1 requires equipment subject to the GA Rule (b) visible emission standard to comply. Meanwhile, Condition 3.4.3, requires equipment subject to the GA Rule (e) PM emission limits comply.

Condition 3.4.2 subjects the wood-fired boiler (ID No. B001) and the natural-gas fired boiler (ID No. B002) to the GA Rule (d) PM and visible emission standards.

Condition 3.4.4 which subjects the facility to GA Rule (n).

**IV. Testing Requirements (with Associated Record Keeping and Reporting)****A. General Testing Requirements**

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

**B. Specific Testing Requirements**

Condition 4.2.1 requires PM and opacity retest on Boiler B001 every 2 years; the frequency can be reduced to every 4 years if the boiler's PM test is less than 75 percent of the allowable emission rate. These tests help verify continuous compliance with Georgia Rule (d) PM and opacity limits because Boiler B001 fires wood.

## V. Monitoring Requirements

### A. General Monitoring Requirements

Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

### B. Specific Monitoring Requirements

Conditions 5.2.1 and 5.2.2 require that monitoring and maintenance checks be conducted and recorded for the multiclone (ID No. MC01) and cyclone (ID No. CY04).

Condition 5.2.3 includes the 5-year tune-up requirements specified in 40 CFR 63 Subpart JJJJJ.

### C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, "Compliance Assurance Monitoring" because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

Although the planer mill (ID No. PM01) is equipped with a cyclone (ID No. CY04), the Division believes that the cyclone is installed to reclaim material rather than for achieving compliance with the GA Rule (b) visible emission standard and GA Rule (e) PM emission standard. Without the cyclone, the planer mill could easily be categorized as a fugitive emission source, and its pre-control PM emissions are believed to be insignificant and minimal (much less than 100 percent of major source threshold) due to the nature of the large size of PM generated by itself. Therefore, the Division determines that the planer mill is not subject to the CAM requirements.

Boiler B001 is potentially subject to the CAM requirements because it is subject to the PM and visible emission limit specified in GA Rule (d) and uses the multiclone (ID No. MC01) to achieve compliance. However, per 40 CFR 64.2(b)(i), B001 is subject to 40 CFR 63 Subpart JJJJJ, and is therefore not subject to the CAM requirements.

All the other emission units included in Table 3.1 of the proposed permit are not equipped with any control devices. Therefore, they are not subject to the CAM requirements.

## **VI. Record Keeping and Reporting Requirements**

### **A. General Record Keeping and Reporting Requirements**

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

### **B. Specific Record Keeping and Reporting Requirements**

Condition 6.1.7 of the proposed Title V initial permit contains the following definitions of exceedances and excursions:

- Subparagraph b.i defines an exceedance as any twelve consecutive month period for which the total amount of wood products processed by Kiln 9 (ID No. DK09) exceeds 115 MMBF.
- Subparagraph c.i defines an excursion as any failure to carry out an inspection required by Conditions 5.2.1, 5.2.2, or 5.2.3.
- Subparagraph c.ii defines an excursion as any adverse condition(s) discovered by weekly inspections specified in Conditions 5.2.1 and 5.2.2, which is not corrected within 24 hours of discovery.

Conditions 6.2.1 and 6.2.2 require that the facility keep records of the monthly and 12-consecutive month total amount of dried lumber processed through Kiln 9 (ID No. DK09). The records will be used to demonstrate compliance with the PSD avoidance limit specified in Condition 3.2.1.

Condition 6.2.3 includes the 40 CFR 60 Subpart Dc fuel consumption requirements for Boiler B001.

Condition 6.2.4 applies the 40 CFR 60 Subpart Dc fuel consumption record keeping requirements for Boiler B002.

Condition 6.2.5 includes the 5-year compliance reporting requirements specified in 40 CFR 63.11225(b).

Condition 6.2.6 includes the record keeping requirements specified in 40 CFR 63.11225(c).

**VII. Specific Requirements****A. Operational Flexibility**

None applicable

**B. Alternative Requirements**

None applicable.

**C. Insignificant Activities**

See Permit Application on GEOS website.  
See Attachment B of the permit

**D. Temporary Sources**

None applicable.

**E. Short-Term Activities**

None applicable.

**F. Compliance Schedule/Progress Reports**

Not applicable.

**G. Emissions Trading**

Not applicable.

**H. Acid Rain Requirements**

Not applicable.

**I. Stratospheric Ozone Protection Requirements**

The standard permit condition pursuant to 40 CFR 82 Subpart F has been included in the Title V permit. The facility has indicated in the application that they do not have air conditioners or refrigeration equipment that use CFC's, HFC's, or other stratospheric ozone-depleting substances.

**J. Pollution Prevention**

Not applicable.

K. Specific Conditions

None.

**VIII. General Provisions**

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.



**Addendum to Narrative**

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//